REMARKS

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated April 15, 2004, claims 1-20 are pending in the application. Applicants respectfully request the Examiner to reconsider the rejections in view of the amended claims.

Claims 6 and 7 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 6 and 7 have been amended and are believed to overcome the rejection. Claim 6 has been amended to clarify that the signal is the inverted electrical signal rather than the compensated electrical output. Also, claim 7 has been amended to be dependent from claim 2 to provide antecedent basis therefore.

Claims 1, 3, 6, 8, 9, 14, 15, and 18-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Oh* (5,633,936). The present invention is very different from that of the *Oh* and the *Nemirovski* references. Claim 1 has been amended to emphasize that the electrical sensor output is a signal that is altered by the acoustics of the speaker. That is, the vibration caused by the speakers may vibrate the sensor and cause the output signal to be different than that of a sensor in a position other than near a speaker. The background of the invention describes a system that uses a microphone that receives signals from the speaker and converts the signals to electrical signals. Applicants submit that such systems are similar to that of the *Nemirovski* and the *Oh* references. As recited in the last paragraph of the detailed description of the present application, "Advantageously, the present invention does not rely on the positioning of a microphone or other transducer device directly adjacent to the speaker. Thus, for automotive applications increased flexibility is achieved in applying the compensation circuit of the present invention." That is, because a microphone does not have to be placed, the packaging flexibility of the system is increased. Claim 1 recites a compensation circuit for a sensor that generates an electrical sensor output position near a speaker of an audio system wherein the electrical sensor output is altered by the acoustics of the speaker. An inverting

circuit is electrically coupled to an output of the audio system. The inverting circuit generates an inverted electrical signal corresponding to the speaker audio output. A sensor controller coupled to the inverting circuit and the sensor generates a compensated electrical output in response to the electrical sensor output and the inverted electrical signal. The compensated electrical output signal is corrected for the alterations by the acoustics of the speaker.

The *Oh* reference is directed to a system that uses a microphone to receive a near end signal and a far end signal. The high pass filter and sampling circuit are used to determine the near end detection signal which is provided to the adaptive filter 16. The adaptive filter 16 filters out the far end speech signal from the sent-in signal 28. The output signal thus has the far end speech signal removed therefrom. The far end speaker 62 will thus not generate the signal from the near end speaker to provide an echo.

Claim 8 is similar to claim 1 in that the altered electrical sensor output is provided because of the acoustic coupling. Both the *Oh* and the *Nemirovski* reference have intended coupling that are received by the microphone. The signal generated from the speaker is used to cancel the electrical signals.

Claim 15 is also similar to claims 1 and 8 in that an electrical sensor output is altered by the acoustics of the speaker. This is not taught or suggested in the *Oh* reference.

Claims 1 and 8 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Nemirovski* (6,671,379). Applicants respectfully traverse.

The *Nemirovski* reference illustrates a microphone that the Examiner describes as a sensor. Applicants respectfully submit that the microphone in this reference as well as the *Oh* reference is not a sensor as set forth in the present invention. Further, the microphone is not altered by the acoustics of the speaker. That is, although the microphone is used to pick up audible signals, the sensor is not an audio sensor; the sensor as described in the present application is an electrical sensor. The *Nemirovski* reference is microphone-based system as described in the background of the present application. Applicants therefore respectfully

request the Examiner to reconsider the rejection of claims 1 and 8 in view of the *Nemirovski* reference in view of the comments set forth above.

Claims 5, 11 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Oh* in view of *Virdee* (5,473,686). The *Virdee* reference also does not teach or suggest the elements missing by the *Oh* reference in that no teaching or suggestion is found for a sensor that has electrical output altered by the acoustics of the speaker. Applicants therefore respectfully request the Examiner for a reconsideration of this rejection as well.

In light of the above amendments and remarks, applicants submit that all rejections are now overcome. The applicants have added no new material to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments the Examiner is respectfully requested to call the undersigned attorney.

Please charge any fees required in the filing of this amendment to Deposit Account 06-1510.

Respectfully submitted,

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